

Notice of Allowability

Application No.

09/934,739

Examiner

Prabodh M. Dharia

Applicant(s)

ROSENBERG ET AL.

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07-21-2006.
2. ☒ The allowed claim(s) is/are 77-82,84-88,91-96,98-104,106,107 and renumbered as 1-26.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 07-21-06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Art Unit: 2629

1. **Status:** Please all the replies and correspondence should be addressed to Examiner's new art unit 2629. Receipt is acknowledged of papers submitted 07-21-2006 under amendments which, have been placed of record in the file. Claims 77-82,84-88,91-96,98-104,106,107 are pending in this office action. Claims 1-76, 83,89,90,97,105 are cancelled.

Response to Amendment

2. Applicant has not added any new matter to amended claims 77,86 and 99. The claimed limitations per amendments are fully supported in specification.

3. Applicant has cancelled dependent objected claims 83,89,90,97 and 105; adding all the limitations of claims 83,90,105 to independent claims 77,86 and 99; claims 77-82,84-88,91-96,98-104,106 and 107 are pending. Claims 94-96 were allowed. Applicant arguments regarding amended independent claims regarding "Processor-executable code, comprising: code to determine a trajectory of a first simulated object, the trajectory associated with a prior position of the first object, simulated motion of the first simulated object being associated with motion of a physical object of a computer interface device', code to simulate a second simulated object configured to impede the simulated motion of the first simulated object when the trajectory of the first simulated object intersects the second simulated object wherein the code to simulate the second simulated object is associated with motion of a second physical object of a second computer interface device, code to display a simulated interaction between the first simulated object and the second simulated object', and code to provide a force feedback via a force feedback mechanism, the force feedback being associated with the simulated interaction of the

Art Unit: 2629

first simulated object with the second simulated object” have been fully considered, searched and are persuasive as they do overcome prior art rejection, which puts application number 09934739 in condition for allowance.

EXAMINER’S AMENDMENT

4. An examiner’s amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner’s amendment was given in a personal telephone interview with Suvashis Bhattacharya on August 14, 2006.

In the claim

On page 5/11, Claim 91, Line 1, after word “claim” delete word “90” and add word “86”.

On page 7/11, Claim 98, Line 1, after word “claim” delete word “83” and add word “77”.

Allowable Subject Matter

5. Claims 77-82,84-88,91-96,98-104,106 and 107 are allowed.
6. The following is an examiner’s statement of reasons for allowance:

Art Unit: 2629

Applicant has cancelled dependent objected claims 83,89,90,97 and 105; adding all the limitations of claims 83,90,105 to independent claims 77,86, and 99; claims 77-82,84-88,91-96,98-104,106 and 107 are pending. Claims 94-96 were allowed. The amended independent claims with objected claims do overcome the prior art rejection of Hiroo Iwata "Artificial Reality with Force-Feedback: Development of Desktop Virtual Space with Compact Master Manipulator," Computer Graphics, vol. 24, No. 4, 1990, pp. 165-170 in view of Schena et al. (2001/0026266 A1) fails to recite or disclose the uniquely distinct features represented by underlined bold claim below;

Processor-executable code, comprising: **code to determine a trajectory of a first simulated object, the trajectory associated with a prior position of the first object, simulated motion of the first simulated object being associated with motion of a physical object of a computer interface device, code to simulate a second simulated object configured to impede the simulated motion of the first simulated object when the trajectory of the first simulated object intersects the second simulated object wherein the code to simulate the second simulated object is associated with motion of a second physical object of a second computer interface device, code to display a simulated interaction between the first simulated object and the second simulated object, and code to provide a force feedback via a force feedback mechanism, the force feedback being associated with the simulated interaction of the first simulated object with the second simulated object.**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2629

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M Dharia whose telephone number is 571-272-7668.

The examiner can normally be reached on M-F 8AM to 5PM.

8. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:


Commissioner of Patents and Trademarks

Washington, D.C. 20231

PD

AU2629

August 12, 2006


BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600